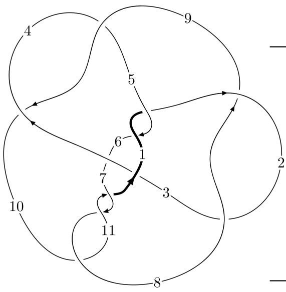
$11n_{171}$ ($K11n_{171}$)



A knot diagram[1]

Linearized knot diagam

$$\rightarrow\downarrow_{5}\rightarrow\downarrow_{8}\rightarrow\downarrow_{1}\rightarrow\downarrow_{9}\rightarrow\downarrow_{1}\rightarrow\downarrow_{4}\rightarrow\downarrow_{11}\rightarrow\downarrow_{2}\rightarrow\downarrow_{4}\rightarrow\downarrow_{8}\rightarrow\downarrow_{7}\rightarrow$$

Solving Sequence

$$8{,}11 \xrightarrow[c_7]{} 7 \xrightarrow[c_{11}]{} 1{,}4 \xrightarrow[c_3]{} 3 \xrightarrow[c_2]{} 2 \xrightarrow[c_6]{} 6 \xrightarrow[c_5]{} 5 \xrightarrow[c_{10}]{} 10 \xrightarrow[c_9]{} 9 \twoheadrightarrow c_1, c_4, c_8$$

Ideals for irreducible components[2] of $X_{\mathbf{par}}$

$$\begin{aligned}
I_1^u &= \langle 3u^{16} + 14u^{15} + \cdots + 2b - 4,\ u^{16} + 5u^{15} + \cdots + 2a + 5,\ u^{17} + 6u^{16} + \cdots - 10u - 4\rangle \\
I_2^u &= \langle 38u^5a^3 - 19u^5a^2 + \cdots + 10a - 14,\ -2u^5a^2 + 5u^5a + \cdots - 9a + 11,\ u^6 - u^5 + 3u^4 - 2u^3 + 2u^2 - u - 1\rangle \\
I_3^u &= \langle -u^8 + u^7 - 5u^6 + 4u^5 - 7u^4 + 5u^3 - 2u^2 + b + 3u,\ -u^8 - 4u^6 - u^5 - 3u^4 - 3u^3 + 3u^2 + a - u + 3, \\
&\quad u^9 - u^8 + 6u^7 - 5u^6 + 12u^5 - 8u^4 + 8u^3 - 5u^2 - 1\rangle
\end{aligned}$$

* 3 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 50 representations.

[1]The image of knot diagram is generated by the software "**Draw programme**" developed by Andrew Bartholomew(`http://www.layer8.co.uk/maths/draw/index.htm#Running-draw`), where we modified some parts for our purpose(`https://github.com/CATsTAILs/LinksPainter`).

[2]All coefficients of polynomials are rational numbers. But the coefficients are sometimes approximated in decimal forms when there is not enough margin.

I. $I_1^u = \langle 3u^{16}+14u^{15}+\cdots+2b-4,\ u^{16}+5u^{15}+\cdots+2a+5,\ u^{17}+6u^{16}+\cdots-10u-4\rangle$

(i) Arc colorings

$$a_8 = \begin{pmatrix}1\\0\end{pmatrix}$$

$$a_{11} = \begin{pmatrix}0\\u\end{pmatrix}$$

$$a_7 = \begin{pmatrix}1\\-u^2\end{pmatrix}$$

$$a_1 = \begin{pmatrix}-u\\u^3+u\end{pmatrix}$$

$$a_4 = \begin{pmatrix}-\frac{1}{2}u^{16}-\frac{5}{2}u^{15}+\cdots+u-\frac{5}{2}\\-\frac{3}{2}u^{16}-7u^{15}+\cdots+\frac{11}{2}u+2\end{pmatrix}$$

$$a_3 = \begin{pmatrix}-\frac{1}{2}u^{16}-\frac{3}{2}u^{15}+\cdots+2u-\frac{1}{2}\\\frac{3}{2}u^{16}+7u^{15}+\cdots-\frac{11}{2}u-4\end{pmatrix}$$

$$a_2 = \begin{pmatrix}u^{16}+\frac{11}{2}u^{15}+\cdots-\frac{7}{2}u-\frac{9}{2}\\\frac{3}{2}u^{16}+7u^{15}+\cdots-\frac{11}{2}u-4\end{pmatrix}$$

$$a_6 = \begin{pmatrix}\frac{3}{4}u^{16}+4u^{15}+\cdots-\frac{15}{4}u-3\\\frac{1}{2}u^{16}+3u^{15}+\cdots-\frac{3}{2}u-3\end{pmatrix}$$

$$a_5 = \begin{pmatrix}\frac{3}{4}u^{16}+4u^{15}+\cdots-\frac{15}{4}u-5\\\frac{1}{2}u^{16}+2u^{15}+\cdots-\frac{3}{2}u-1\end{pmatrix}$$

$$a_{10} = \begin{pmatrix}u\\u\end{pmatrix}$$

$$a_9 = \begin{pmatrix}-\frac{1}{4}u^{16}-u^{15}+\cdots+\frac{11}{4}u^2+\frac{1}{4}u\\\frac{1}{2}u^{16}+3u^{15}+\cdots-\frac{9}{2}u-3\end{pmatrix}$$

$$a_9 = \begin{pmatrix}-\frac{1}{4}u^{16}-u^{15}+\cdots+\frac{11}{4}u^2+\frac{1}{4}u\\\frac{1}{2}u^{16}+3u^{15}+\cdots-\frac{9}{2}u-3\end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 4u^{16}+21u^{15}+86u^{14}+243u^{13}+565u^{12}+1065u^{11}+1695u^{10}+2282u^9+2614u^8+2548u^7+2087u^6+1403u^5+739u^4+258u^3+31u^2-30u-26$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_5	$u^{17} + 13u^{16} + \cdots + 608u + 64$
c_2, c_4, c_8 c_9	$u^{17} + 5u^{15} + \cdots + 2u + 1$
c_3, c_6	$u^{17} - u^{16} + \cdots - 2u + 1$
c_7, c_{10}, c_{11}	$u^{17} - 6u^{16} + \cdots - 10u + 4$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{17} + 7y^{16} + \cdots + 25600y - 4096$
c_2, c_4, c_8 c_9	$y^{17} + 10y^{16} + \cdots + 2y - 1$
c_3, c_6	$y^{17} - 19y^{16} + \cdots + 26y - 1$
c_7, c_{10}, c_{11}	$y^{17} + 16y^{16} + \cdots + 172y - 16$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.211807 + 0.989057I$ $a = 0.005734 + 0.720235I$ $b = 0.595368 + 0.304010I$	$2.01657 - 1.88656I$	$-7.16642 + 4.34239I$
$u = 0.211807 - 0.989057I$ $a = 0.005734 - 0.720235I$ $b = 0.595368 - 0.304010I$	$2.01657 + 1.88656I$	$-7.16642 - 4.34239I$
$u = -0.939675 + 0.221289I$ $a = 0.144054 + 0.332191I$ $b = 1.160160 - 0.774359I$	$-0.01418 + 8.74564I$	$-9.43323 - 6.21574I$
$u = -0.939675 - 0.221289I$ $a = 0.144054 - 0.332191I$ $b = 1.160160 + 0.774359I$	$-0.01418 - 8.74564I$	$-9.43323 + 6.21574I$
$u = -0.284641 + 1.111420I$ $a = 0.49091 - 1.57082I$ $b = 0.271257 - 0.887192I$	$-0.64441 + 2.30767I$	$-10.18608 - 0.27730I$
$u = -0.284641 - 1.111420I$ $a = 0.49091 + 1.57082I$ $b = 0.271257 + 0.887192I$	$-0.64441 - 2.30767I$	$-10.18608 + 0.27730I$
$u = -0.591453 + 1.005910I$ $a = -0.743115 + 0.715842I$ $b = -0.247326 - 0.243911I$	$2.42082 - 3.43267I$	$-8.02158 + 2.98804I$
$u = -0.591453 - 1.005910I$ $a = -0.743115 - 0.715842I$ $b = -0.247326 + 0.243911I$	$2.42082 + 3.43267I$	$-8.02158 - 2.98804I$
$u = -0.741532 + 0.257409I$ $a = -0.268555 - 0.609503I$ $b = -1.069590 + 0.137343I$	$-3.15113 + 1.41738I$	$-9.71131 - 4.88398I$
$u = -0.741532 - 0.257409I$ $a = -0.268555 + 0.609503I$ $b = -1.069590 - 0.137343I$	$-3.15113 - 1.41738I$	$-9.71131 + 4.88398I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.41260 + 1.41870I$ $a = -0.57836 + 1.72237I$ $b = -1.61137 + 1.55108I$	$5.1608 + 13.6066I$	$-5.59446 - 7.46007I$
$u = -0.41260 - 1.41870I$ $a = -0.57836 - 1.72237I$ $b = -1.61137 - 1.55108I$	$5.1608 - 13.6066I$	$-5.59446 + 7.46007I$
$u = -0.32482 + 1.45291I$ $a = 0.99147 - 1.18539I$ $b = 1.70555 - 1.12903I$	$2.38666 + 5.36037I$	$-5.12085 - 4.62281I$
$u = -0.32482 - 1.45291I$ $a = 0.99147 + 1.18539I$ $b = 1.70555 + 1.12903I$	$2.38666 - 5.36037I$	$-5.12085 + 4.62281I$
$u = -0.05895 + 1.66246I$ $a = -0.577246 + 0.085860I$ $b = -1.142700 + 0.323103I$	$11.85540 - 1.51678I$	$-9.69360 + 5.86030I$
$u = -0.05895 - 1.66246I$ $a = -0.577246 - 0.085860I$ $b = -1.142700 - 0.323103I$	$11.85540 + 1.51678I$	$-9.69360 - 5.86030I$
$u = 0.283727$ $a = 1.07024$ $b = -0.322697$	-0.582703	-17.1450

II. $\boldsymbol{I_2^u = \langle 38u^5a^3 - 19u^5a^2 + \cdots + 10a - 14,\ -2u^5a^2 + 5u^5a + \cdots - 9a + 11,\ u^6 - u^5 + 3u^4 - 2u^3 + 2u^2 - u - 1\rangle}$

(i) Arc colorings

$$a_8 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -u \\ u^3 + u \end{pmatrix}$$
$$a_4 = \begin{pmatrix} a \\ -4.22222a^3u^5 + 2.11111a^2u^5 + \cdots - 1.11111a + 1.55556 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} -3.22222a^3u^5 + 2.11111a^2u^5 + \cdots - 0.111111a - 0.444444 \\ \frac{11}{9}u^5a^3 - \frac{10}{9}u^5a^2 + \cdots + \frac{1}{9}a + \frac{13}{9} \end{pmatrix}$$
$$a_2 = \begin{pmatrix} -2u^5a^3 + u^5a^2 + \cdots + a^2 + 1 \\ \frac{11}{9}u^5a^3 - \frac{10}{9}u^5a^2 + \cdots + \frac{1}{9}a + \frac{13}{9} \end{pmatrix}$$
$$a_6 = \begin{pmatrix} \frac{8}{9}u^5a^3 - \frac{8}{9}u^5a^2 + \cdots + \frac{13}{9}a - \frac{4}{9} \\ \frac{8}{9}u^5a^2 - \frac{4}{9}u^5 + \cdots + \frac{10}{9}a^2 + \frac{4}{9} \end{pmatrix}$$
$$a_5 = \begin{pmatrix} \frac{5}{3}u^5a^3 - \frac{16}{9}u^5a^2 + \cdots + \frac{7}{3}a - \frac{8}{9} \\ -\frac{23}{9}u^5a^3 + \frac{5}{3}u^5a^2 + \cdots - \frac{7}{9}a + \frac{4}{3} \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} u \\ u \end{pmatrix}$$
$$a_9 = \begin{pmatrix} \frac{10}{9}u^5a^3 - \frac{10}{9}u^5a^2 + \cdots - \frac{4}{9}a + \frac{4}{9} \\ -1.22222a^3u^5 + 2.33333a^2u^5 + \cdots - 1.11111a - 1.33333 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} \frac{10}{9}u^5a^3 - \frac{10}{9}u^5a^2 + \cdots - \frac{4}{9}a + \frac{4}{9} \\ -1.22222a^3u^5 + 2.33333a^2u^5 + \cdots - 1.11111a - 1.33333 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -\frac{44}{9}u^5a^3 + \frac{40}{9}u^5a^2 + \cdots - \frac{40}{9}a - \frac{106}{9}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_5	$(u^2 - u + 1)^{12}$
c_2, c_4, c_8 c_9	$u^{24} - u^{23} + \cdots - 26u + 79$
c_3, c_6	$u^{24} - 5u^{23} + \cdots + 36u + 13$
c_7, c_{10}, c_{11}	$(u^6 + u^5 + 3u^4 + 2u^3 + 2u^2 + u - 1)^4$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$(y^2 + y + 1)^{12}$
c_2, c_4, c_8 c_9	$y^{24} + 15y^{23} + \cdots + 53676y + 6241$
c_3, c_6	$y^{24} - 5y^{23} + \cdots - 5352y + 169$
c_7, c_{10}, c_{11}	$(y^6 + 5y^5 + 9y^4 + 4y^3 - 6y^2 - 5y + 1)^4$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.873214$ $a = 0.374038 + 0.292431I$ $b = 0.837071 - 0.727051I$	$-2.72528 + 2.02988I$	$-10.26950 - 3.46410I$
$u = 0.873214$ $a = 0.374038 - 0.292431I$ $b = 0.837071 + 0.727051I$	$-2.72528 - 2.02988I$	$-10.26950 + 3.46410I$
$u = 0.873214$ $a = 0.021379 + 0.392452I$ $b = -1.322910 - 0.114439I$	$-2.72528 + 2.02988I$	$-10.26950 - 3.46410I$
$u = 0.873214$ $a = 0.021379 - 0.392452I$ $b = -1.322910 + 0.114439I$	$-2.72528 - 2.02988I$	$-10.26950 + 3.46410I$
$u = -0.138835 + 1.234450I$ $a = -0.541688 + 0.032957I$ $b = 0.769169 - 0.336322I$	$7.89505 - 0.05747I$	$-2.57572 - 0.22068I$
$u = -0.138835 + 1.234450I$ $a = -1.30626 + 0.70357I$ $b = -2.42790 + 0.70593I$	$7.89505 + 4.00229I$	$-2.57572 - 7.14888I$
$u = -0.138835 + 1.234450I$ $a = -0.86980 - 2.16519I$ $b = 0.20728 - 1.55918I$	$7.89505 + 4.00229I$	$-2.57572 - 7.14888I$
$u = -0.138835 + 1.234450I$ $a = 0.36392 + 2.58238I$ $b = -0.39780 + 2.68606I$	$7.89505 - 0.05747I$	$-2.57572 - 0.22068I$
$u = -0.138835 - 1.234450I$ $a = -0.541688 - 0.032957I$ $b = 0.769169 + 0.336322I$	$7.89505 + 0.05747I$	$-2.57572 + 0.22068I$
$u = -0.138835 - 1.234450I$ $a = -1.30626 - 0.70357I$ $b = -2.42790 - 0.70593I$	$7.89505 - 4.00229I$	$-2.57572 + 7.14888I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.138835 - 1.234450I$ $a = -0.86980 + 2.16519I$ $b = 0.20728 + 1.55918I$	$7.89505 - 4.00229I$	$-2.57572 + 7.14888I$
$u = -0.138835 - 1.234450I$ $a = 0.36392 - 2.58238I$ $b = -0.39780 - 2.68606I$	$7.89505 + 0.05747I$	$-2.57572 + 0.22068I$
$u = 0.408802 + 1.276380I$ $a = -0.605131 - 0.405910I$ $b = -0.216543 - 0.031148I$	$1.23922 - 2.56224I$	$-6.58114 - 0.25928I$
$u = 0.408802 + 1.276380I$ $a = 0.606056 + 1.218440I$ $b = 1.35224 + 0.72201I$	$1.23922 - 2.56224I$	$-6.58114 - 0.25928I$
$u = 0.408802 + 1.276380I$ $a = 0.76345 + 1.35547I$ $b = 0.949823 + 0.357497I$	$1.23922 - 6.62201I$	$-6.58114 + 6.66892I$
$u = 0.408802 + 1.276380I$ $a = -0.06024 - 1.76254I$ $b = -0.91937 - 1.68647I$	$1.23922 - 6.62201I$	$-6.58114 + 6.66892I$
$u = 0.408802 - 1.276380I$ $a = -0.605131 + 0.405910I$ $b = -0.216543 + 0.031148I$	$1.23922 + 2.56224I$	$-6.58114 + 0.25928I$
$u = 0.408802 - 1.276380I$ $a = 0.606056 - 1.218440I$ $b = 1.35224 - 0.72201I$	$1.23922 + 2.56224I$	$-6.58114 + 0.25928I$
$u = 0.408802 - 1.276380I$ $a = 0.76345 - 1.35547I$ $b = 0.949823 - 0.357497I$	$1.23922 + 6.62201I$	$-6.58114 - 6.66892I$
$u = 0.408802 - 1.276380I$ $a = -0.06024 + 1.76254I$ $b = -0.91937 + 1.68647I$	$1.23922 + 6.62201I$	$-6.58114 - 6.66892I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.413150$ $a = 1.19455 + 0.88026I$ $b = 0.07172 - 1.48991I$	$4.19595 - 2.02988I$	$-11.41678 + 3.46410I$
$u = -0.413150$ $a = 1.19455 - 0.88026I$ $b = 0.07172 + 1.48991I$	$4.19595 + 2.02988I$	$-11.41678 - 3.46410I$
$u = -0.413150$ $a = 0.05973 + 3.05273I$ $b = 0.597209 - 0.331281I$	$4.19595 + 2.02988I$	$-11.41678 - 3.46410I$
$u = -0.413150$ $a = 0.05973 - 3.05273I$ $b = 0.597209 + 0.331281I$	$4.19595 - 2.02988I$	$-11.41678 + 3.46410I$

III. $\boldsymbol{I_3^u = \langle -u^8 + u^7 + \cdots + b + 3u,\ -u^8 - 4u^6 - u^5 - 3u^4 - 3u^3 + 3u^2 + a - u + 3,\ u^9 - u^8 + \cdots - 5u^2 - 1\rangle}$

(i) Arc colorings

$$a_8 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -u \\ u^3 + u \end{pmatrix}$$

$$a_4 = \begin{pmatrix} u^8 + 4u^6 + u^5 + 3u^4 + 3u^3 - 3u^2 + u - 3 \\ u^8 - u^7 + 5u^6 - 4u^5 + 7u^4 - 5u^3 + 2u^2 - 3u \end{pmatrix}$$

$$a_3 = \begin{pmatrix} u^7 - u^6 + 5u^5 - 4u^4 + 7u^3 - 5u^2 + 2u - 3 \\ u^8 - u^7 + 5u^6 - 4u^5 + 8u^4 - 5u^3 + 4u^2 - 3u \end{pmatrix}$$

$$a_2 = \begin{pmatrix} u^8 + 4u^6 + u^5 + 4u^4 + 2u^3 - u^2 - u - 3 \\ u^8 - u^7 + 5u^6 - 4u^5 + 8u^4 - 5u^3 + 4u^2 - 3u \end{pmatrix}$$

$$a_6 = \begin{pmatrix} u^6 - 2u^5 + 5u^4 - 7u^3 + 7u^2 - 5u + 2 \\ -u^8 + 2u^7 - 6u^6 + 8u^5 - 11u^4 + 8u^3 - 6u^2 + u \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -u^7 + 2u^6 - 6u^5 + 8u^4 - 11u^3 + 9u^2 - 5u + 2 \\ -u^8 + u^7 - 5u^6 + 4u^5 - 8u^4 + 4u^3 - 3u^2 + u + 1 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} u \\ u \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -2u^8 + 3u^7 - 12u^6 + 14u^5 - 23u^4 + 19u^3 - 13u^2 + 8u \\ u^7 - u^6 + 5u^5 - 4u^4 + 7u^3 - 4u^2 + 2u - 2 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -2u^8 + 3u^7 - 12u^6 + 14u^5 - 23u^4 + 19u^3 - 13u^2 + 8u \\ u^7 - u^6 + 5u^5 - 4u^4 + 7u^3 - 4u^2 + 2u - 2 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -3u^6 - 11u^4 + u^3 - 10u^2 + u - 3$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^9 + 3u^7 - 3u^6 + u^5 - 4u^4 + 3u^3 + u - 1$
c_2, c_9	$u^9 + 4u^7 - u^6 + 6u^5 - 2u^4 + 3u^3 - u^2 + 1$
c_3, c_6	$u^9 + u^8 + 3u^6 + 4u^5 + u^4 + 3u^3 + 3u^2 + 1$
c_4, c_8	$u^9 + 4u^7 + u^6 + 6u^5 + 2u^4 + 3u^3 + u^2 - 1$
c_5	$u^9 + 3u^7 + 3u^6 + u^5 + 4u^4 + 3u^3 + u + 1$
c_7	$u^9 - u^8 + 6u^7 - 5u^6 + 12u^5 - 8u^4 + 8u^3 - 5u^2 - 1$
c_{10}, c_{11}	$u^9 + u^8 + 6u^7 + 5u^6 + 12u^5 + 8u^4 + 8u^3 + 5u^2 + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^9 + 6y^8 + 11y^7 + 3y^6 - 3y^5 - 4y^4 + 5y^3 - 2y^2 + y - 1$
c_2, c_4, c_8 c_9	$y^9 + 8y^8 + 28y^7 + 53y^6 + 56y^5 + 30y^4 + 7y^3 + 3y^2 + 2y - 1$
c_3, c_6	$y^9 - y^8 + 2y^7 - 5y^6 + 4y^5 + 3y^4 - 3y^3 - 11y^2 - 6y - 1$
c_7, c_{10}, c_{11}	$y^9 + 11y^8 + 50y^7 + 119y^6 + 150y^5 + 76y^4 - 26y^3 - 41y^2 - 10y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_3^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.075853 + 1.213420I$ $a = 0.03154 - 1.82376I$ $b = 1.20483 - 1.57677I$	$7.92625 + 2.61535I$	$-2.34637 - 1.10608I$
$u = -0.075853 - 1.213420I$ $a = 0.03154 + 1.82376I$ $b = 1.20483 + 1.57677I$	$7.92625 - 2.61535I$	$-2.34637 + 1.10608I$
$u = 0.768805$ $a = -0.376504$ $b = -1.02947$	-3.42422	-12.1500
$u = 0.369661 + 1.332040I$ $a = 0.614696 + 1.165930I$ $b = 1.003450 + 0.853584I$	$0.82219 - 4.09909I$	$-8.12215 + 4.24227I$
$u = 0.369661 - 1.332040I$ $a = 0.614696 - 1.165930I$ $b = 1.003450 - 0.853584I$	$0.82219 + 4.09909I$	$-8.12215 - 4.24227I$
$u = -0.140254 + 0.400864I$ $a = -2.50540 + 0.68883I$ $b = -0.069927 - 1.023240I$	$5.21158 - 1.80390I$	$-1.75250 + 1.15156I$
$u = -0.140254 - 0.400864I$ $a = -2.50540 - 0.68883I$ $b = -0.069927 + 1.023240I$	$5.21158 + 1.80390I$	$-1.75250 - 1.15156I$
$u = -0.03796 + 1.59738I$ $a = -0.452577 + 0.521156I$ $b = -1.123620 + 0.702862I$	$12.42610 - 1.12659I$	$0.795880 - 0.970083I$
$u = -0.03796 - 1.59738I$ $a = -0.452577 - 0.521156I$ $b = -1.123620 - 0.702862I$	$12.42610 + 1.12659I$	$0.795880 + 0.970083I$

IV. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^2-u+1)^{12}(u^9+3u^7-3u^6+u^5-4u^4+3u^3+u-1)$ $\cdot(u^{17}+13u^{16}+\cdots+608u+64)$
c_2, c_9	$(u^9+4u^7+\cdots-u^2+1)(u^{17}+5u^{15}+\cdots+2u+1)$ $\cdot(u^{24}-u^{23}+\cdots-26u+79)$
c_3, c_6	$(u^9+u^8+\cdots+3u^2+1)(u^{17}-u^{16}+\cdots-2u+1)$ $\cdot(u^{24}-5u^{23}+\cdots+36u+13)$
c_4, c_8	$(u^9+4u^7+\cdots+u^2-1)(u^{17}+5u^{15}+\cdots+2u+1)$ $\cdot(u^{24}-u^{23}+\cdots-26u+79)$
c_5	$(u^2-u+1)^{12}(u^9+3u^7+3u^6+u^5+4u^4+3u^3+u+1)$ $\cdot(u^{17}+13u^{16}+\cdots+608u+64)$
c_7	$(u^6+u^5+3u^4+2u^3+2u^2+u-1)^4$ $\cdot(u^9-u^8+6u^7-5u^6+12u^5-8u^4+8u^3-5u^2-1)$ $\cdot(u^{17}-6u^{16}+\cdots-10u+4)$
c_{10}, c_{11}	$(u^6+u^5+3u^4+2u^3+2u^2+u-1)^4$ $\cdot(u^9+u^8+6u^7+5u^6+12u^5+8u^4+8u^3+5u^2+1)$ $\cdot(u^{17}-6u^{16}+\cdots-10u+4)$

V. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_5	$((y^2+y+1)^{12})(y^9+6y^8+\cdots+y-1)$ $\cdot\,(y^{17}+7y^{16}+\cdots+25600y-4096)$
c_2, c_4, c_8 c_9	$(y^9+8y^8+28y^7+53y^6+56y^5+30y^4+7y^3+3y^2+2y-1)$ $\cdot\,(y^{17}+10y^{16}+\cdots+2y-1)(y^{24}+15y^{23}+\cdots+53676y+6241)$
c_3, c_6	$(y^9-y^8+2y^7-5y^6+4y^5+3y^4-3y^3-11y^2-6y-1)$ $\cdot\,(y^{17}-19y^{16}+\cdots+26y-1)(y^{24}-5y^{23}+\cdots-5352y+169)$
c_7, c_{10}, c_{11}	$(y^6+5y^5+9y^4+4y^3-6y^2-5y+1)^4$ $\cdot\,(y^9+11y^8+50y^7+119y^6+150y^5+76y^4-26y^3-41y^2-10y-1)$ $\cdot\,(y^{17}+16y^{16}+\cdots+172y-16)$